IN THE SPECIFICATION

Please amend paragraph [0007] beginning on page 5 as follows:

--The present invention has been accomplished to solve the above-described problems. An object of the present invention is to provide a diffraction grating element capable of improving the diffraction efficiency and reducing the diffraction efficiency in a wide wavelength band by canceling the polarization dependence due to the reflection and the polarization dependence due to the structure respectively. Also, another object of the present invention is to provide a method of fabricating or designing such diffraction grating element.--

Please amend paragraph [0015] beginning on page 9 as follows:

--A diffraction grating element in accordance with a third invention comprises, (1) given first-third planes disposed parallel with each other in order, a first medium (index of refraction n_1) provided at the outer side than the first plane being in contact with the first plane, (2) a second medium (index of refraction n_2) and a third medium (index of refraction n_3, $n_3<n_2$) disposed alternately in a predetermined direction parallel with the first plane between the second plane and the third plane being in contact with the second plane and the third plane to constitute a diffraction grating, (3) a fourth medium (index of refraction n_4) provided at the outer side than the third plane being in contact with the third plane, and (5) a fifth medium (average index of refraction n_5) provided between the first plane and the second plane being in contact with the first plane and the second plane. And, given that the average index of refraction between the [[first]] second plane and the ~~second~~ third plane is n_{av}, the average index of refraction n_5 of the fifth medium satisfies a relational expression of "$n_1<n_5<n_{av}$" or "$n_{av}<n_5<n_1$".--

Please amend the specification beginning on page 19, line 2 as follows:

--Fig. 20 is a graph showing the aspect ratio of grooves ~~of the diffraction grating portion~~ in the diffraction grating element in accordance with the fourth embodiment.—

Please amend paragraph [0043] beginning on page 28 as follows:

--When the layer, which is constituted of the second medium 12 or third medium 13, is subjected to the etching, it is preferred that the fourth medium 14 is constituted of a predetermined material, of which etching rate is slower than that of the second medium 12 or third medium 13. In such case, it is possible to terminate the etching at the upper surface of the fourth medium 14 (second plane P_2). From the above viewpoint, it is preferred that, for example, the fourth medium 14 is constituted of any one of Al_2O_3, MgO, Nd_2O_3 and fluorinated compound (AlF_3, MgF_2, CaF_2, NdF_3 or the like). Also, it is preferred that the second medium 12 or the third medium 13 is constituted of any one of [[Ti_2]] $\underline{TiO_2}$, Nb_2O_5, Ta_2O_5, SiN, SiO_2, SiO, ZrO_2 and Sb_2O_3.--

Please amend paragraph [0099] beginning on page 55 as follows:

--Fig. 16 is a graph showing the characteristics of the zero-order reflection diffraction efficiency of the diffraction grating element in accordance with the fourth embodiment and the zero-order reflection diffraction efficiency of the above-described equivalent model. The graph shows the characteristics of the zero-order reflection diffraction efficiency of the diffraction grating element 40 which is actually fabricated and the above-described equivalent model under the conditions that period Λ=1.0μm, f=0.579, H=1.164μm, h_{ar2}=0.252μm, h_{ar1}=-0.2μm, the waveband of the light is 1550nm band (C band) and the incident angle θ of the light is 50.58°. Here, h_{ar1} is a minus value. The absolute value thereof represents the thickness of the first reflection-inhibiting portion; the sign represents the structure of the reflection-inhibiting portion as described later. In Fig. 16, the characteristics indicated with the [[solid]] broken line represents a result of analysis of the diffraction grating element 40, which was actually fabricated; and the characteristics indicated with the ~~broken~~ solid line represents a result of analysis using the above-described equivalent model. As is demonstrated in the graph, although a minute difference is found in the central wavelength, according to the designing method using the equivalent model, precise characteristics of the diffraction grating element 40 of the embodiment can be obtained.--

Please amend paragraph [0106] beginning on page 59 as follows:

--Fig. 20 is a graph showing the aspect ratio of the ~~diffraction grating portion~~ grooves in the diffraction grating element in accordance with the fourth embodiment. According to Fig. 20, when h_{ar1} is -0.2μm or 0.1μm, since the aspect ratio is particularly small, it is understood that the diffraction grating portion 43 can be formed easily.--